

Drug use among 17-year-olds: initial results of the ESCAPAD 2011 survey

Eleven years of assessing legal and illegal drug use in the teenage population

Stanislas Spilka
Olivier Le Nézet
Marie-Line Tovar

In March 2011, the French Monitoring Centre for Drugs and Drug Addiction surveyed 27,402 metropolitan 17-year-olds on their use of legal and illegal psychoactive substances. Including this seventh edition of the ESCAPAD health and drug use survey, there is now over a decade's worth of information available on drug use.

These initial results demonstrate that from 2008 to 2011, lifetime use¹ of tobacco and alcohol continued to decline, while that of cannabis stabilised. Likewise, lifetime use of other illegal drugs, such as cocaine, ecstasy and heroin, is on the decline and showing levels of use that remain low. At the same time, regular tobacco and alcohol use rose, as have Heavy Episodic Drinking (HED), or repeated and regular drunkenness episodes. In contrast, cannabis, which remains the most frequently used illegal drug, was the only substance whose use in the last year and in the last month seemed to be on the decline. Regarding average ages of first time use, in 2011 teenagers reported later

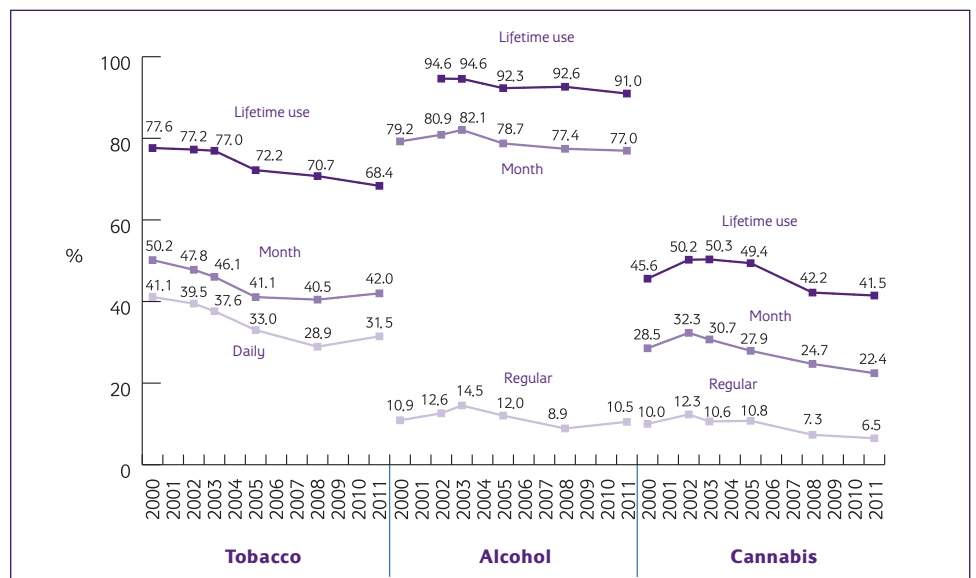
tobacco first time use (at 14.1 years of age) while first drunkenness episodes and cannabis first time use continued to take place at 15.3 years of age, on average. The results presented in this issue of Tendances will focus on these new trends and on teenagers' relationship with alcohol. Furthermore, for the first time it will be possible to establish a three-year trend on the use of the main pharmaceutical classes of psychotropic medicine by 17-year-olds.

Alcohol, tobacco and cannabis

In metropolitan France in 2011, the most widespread substances among 17-year-olds were still, in the following order, alcohol, tobacco and cannabis (figure 1). Subsequently, nine out of every ten teens (91.0%) have already tried alcohol, and nearly seven out of every ten (68.4%) stated having already smoked a cigarette in their life. A little over four out of every ten (41.5%) reported already having

1. To see the indicator definitions, refer to the methodology box

Figure 1 - Trends from 2000 to 2011 in the levels of use of tobacco, alcoholic beverages and cannabis by 17-year-olds in metropolitan France (in %)



Source: ESCAPAD survey, OFDT

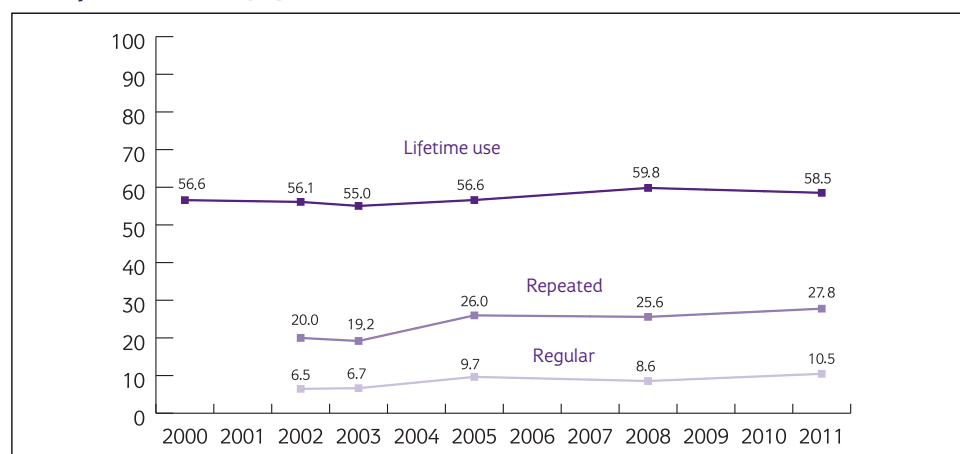
had the opportunity to use cannabis. Compared with 2008, these levels of lifetime use have dropped slightly, except for cannabis, whose decrease in lifetime use was not enough to be statistically significant.

These recent declines go hand in hand with an increase in the proportion of teenagers who have never tried any of these three substances (6.6% vs. 5.1% in 2008). These downward trends in substance lifetime use were comparable for boys and girls, except for tobacco, whose decline was more marked for boys (66.9% vs. 70.5% in 2008) than for girls (69.9% vs. 71.0%).

This less widespread use of tobacco and alcohol was not found among the more frequent users, which have increased between 2008 and 2010. This increase in regular uses is in contrast with the decrease in tobacco use since 2000 and the decrease in alcohol use since 2003 [1; 2]; nevertheless, the increase remains modest and does not entirely offset the decreases observed from 2005 to 2008 [3; 4]. Subsequently, although the level in daily smoking rose from 2008 to 2011 (31.5% vs. 28.9%, $p < 0.001^2$), both in boys and girls, it still remained lower than the 2005 level (33.0%). Intense use (at least ten cigarettes per day) did not progress. For the first time, the lifetime use and the occasional use of tobacco became more significant in girls (for both of these indicators, the sex ratio was less than 1), but boys continued to smoke more frequently: 32.7% of boys stated using tobacco on a daily basis versus 30.2% of girls ($p < 0.001$). Likewise, 9.6% of boys smoked at least 10 cigarettes per day versus 5.8% of teenage girls ($p < 0.001$). Regular alcohol use increased by 18.0% from 2008 to 2011 (10.5% vs. 8.9%, $p > 0.001$). Once again, these increases were relative more to boys than to girls. Consequently, regular alcoholic beverage consumption remains predominantly masculine despite the increases seen in girls (5.6% vs. 4.0% in 2008, $p < 0.001$).

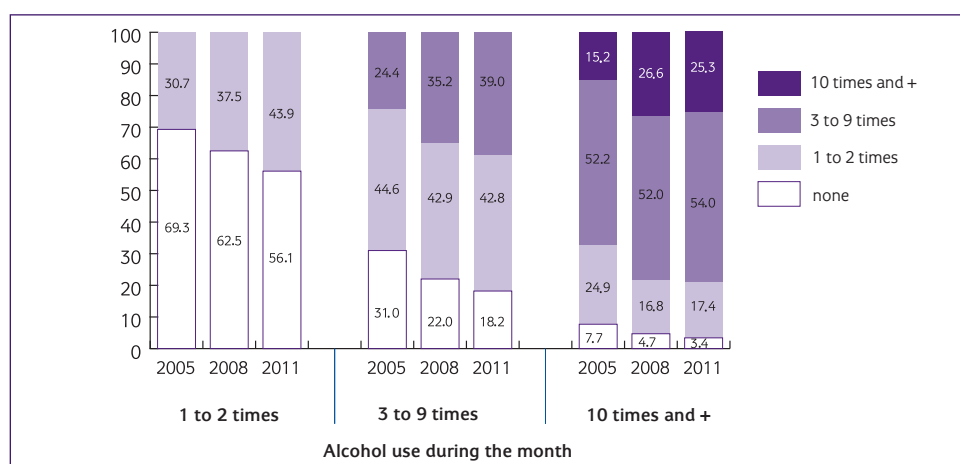
The stagnation in cannabis lifetime use observed today occurs after a decrease that was rather marked (from 49.4% in 2005 to 42.2% in 2008). This stability masks the continued decrease in boys (44.0% in 2011 vs. 46.3% in 2008, $p < 0.001$) and an upturn - albeit non-significant - in young girls (38.9% vs. 37.9%). In contrast to tobacco and alcohol, this stagnation in the spread of cannabis use was accompanied by a decrease in use in the last year and in the last month. Today, slightly less than one quarter (22.4%) of teenagers stated using it at least once a month. This trend, which started in 2002, seems to be long-term. In particular, the decrease in regular use (at least 10 times a month) was steady, at 6.5% of regular users in 2011 versus 7.3% in 2008 ($p < 0.001$) for both genders. However, the measured decreases appear to be less pronounced than the downtrend observed from 2005 to 2008. This edition of the ESCAPAD survey also questioned young people on how they supply themselves: fewer than 2% of current users stated having grown the cannabis they smoked during their last use; other users either purchased their most recently-used cannabis or obtained it free of charge.

Figure 2 - Trends from 2000 to 2011 in drunken episodes among 17-year-olds in metropolitan France (%).



Source: ESCAPAD survey, OFDT

Figure 3 - Breakdown of Heavy Episodic Drinking from 2005 to 2011 according to the frequency of consumption in the last 30 days (%).



Interpretation: of those who drank alcoholic beverages once or twice in the last 30 days in 2011, 43.9% stated having had at least one Heavy Episodic Drinking, compared to 30.7% in 2005.

Source: ESCAPAD survey, OFDT

Drunken episodes and Heavy Episodic Drinking (HED)

In parallel to these levels of alcohol consumption, the survey also examined different modes of drinking, such as drunken episodes and Heavy Episodic Drinking (HED). Since 2005, the following question has been included in the ESCAPAD survey: "In the last 30 days, how many times did you have at least five drinks on a single occasion?" This question aims to qualify, to the greatest extent possible, a mode of alcohol consumption that resembles Anglo-Saxon binge drinking. Beyond the accepted description, occasional but significant or intense consumption leading to alcoholic intoxication, the assessment aims to depict alcohol consumption that is clearly more intense than a "moderate"³ consumption, and which takes place in a relatively short time frame with the clear intention of quickly achieving a state of inebriation.

The trends in drunken episodes from 2008 to 2011 were very similar to those of alcohol consumption (figure 2). Together with these lifetime use behaviours that are now on the decline, the two other accepted indicators de-

monstrated the upward trend between the two last ESCAPAD surveys: repeated drunken episodes (i.e., at least three episodes in the last year) increased from 25.6% to 27.8% ($p < 0.01$) and regular drunkenness (i.e., at least 10 episodes in the last year) increased from 8.6% to 10.5% ($p < 0.001$) for girls and boys (5.7% and 15.0% respectively in 2011 versus 4.6% and 12.4% in 2008).

More than half of all teenagers have engaged in HED: in 2011, 53.2% stated having consumed at least five drinks on a single occasion in the last month. In 2008 this figure was 48.7% and in 2005, 45.8%. This trend, which is clearly on the rise, was also found among those who stated having engaged in such drinking behaviour at least three times in the last month (i.e., 22.6%, 19.7% and 17.9% in 2011, 2008 and 2005 respectively) or ten times or more (2.7%, 2.4% and 2.1% respectively). Like alcohol consumption and

2. Specifies the significance level of the Chi-2 test.

3. For the WHO (World Health Organization), moderate consumption is fewer than 21 drinks per week and no more than five drinks on a single occasion for men and 14 drinks per week and no more than 4 drinks on a single occasion for women.

drunken episodes, HED is much more frequent among boys (59.7% stated HED at least once in the last month, versus 46.5% of girls).

The increase in such alcohol consumption behaviour seems to indicate a change in the way teenagers consume. Even though HED (figure 3) remains more frequent among regular alcohol consumers, such behaviour has become also widespread among teenagers who drink less frequently (fewer than 10 times in the last month). Subsequently, in 2011, there was a 50% increase in the proportion of regular drinkers who stated having had at least 10 HED episodes compared to 2005 (25.3% versus 15.2%). At the same time, 43.9% of those who only drank alcohol once or twice in the last month also stated having experienced one or two HED episodes in 2011; this figure was 30.7% in 2005, representing a relative increase of 43.0% in six years.

This change in the structure of alcohol consumption behaviour seen here could be linked to the fact that teenagers may be more sensitive to prevention campaigns. These awareness-raising campaigns may translate into a greater propensity by teenagers today to report "risky" behaviours that formerly had not been identified as such.

The average age of initiation

In 2011, the mean age of first cigarette use among surveyed 17-year-olds was 14.1 years (figure 4); the average ages of the first drunken episode and cannabis first time use were a year higher (15.2 and 15.3 years respectively). For tobacco and cannabis, the average ages of first time use followed similar trends: they decreased until 2005, and then the trend reversed, and more markedly so for tobacco in the most recent period. Therefore today, teenagers are six months older when they try their first cigarette than their 2008 counterparts. The age of a teenager's first drunken episode has remained relatively unchanged, however, over the eleven-year observation period. As for first time use, the progression to daily tobacco use happens later and later (at age 15.0 in 2011 versus 14.8 in 2008). Moreover, in 2011, only 3.5% of teenagers stated being daily smokers since the age of 13 or under; in 2008, they were 4.5%. Finally, the mean time lapse between trying one's first cigarette and smoking daily fell from 1.8 years in 2008 to 1.4 years in 2011. When considered with the increase in the number of daily smokers, these recent trends suggest that teenagers might have merely delayed their entrance into tobacco use. These results corroborate those observed in the HBSC 2010 survey, in which first time use among 13-year-old students was on the decline compared with the 2006 results, while conversely, 15-year-old students had tobacco-use levels that were comparable to those measured in 2006 [5]. Perhaps this is the result of the ban on tobacco sales to minors, the impact of which seems to be significant among the youngest teenagers, but less so among older teenagers.

Figure 4 - Trend in the average age of 1st cigarette use, 1st drunken episode and 1st cannabis use (in years)

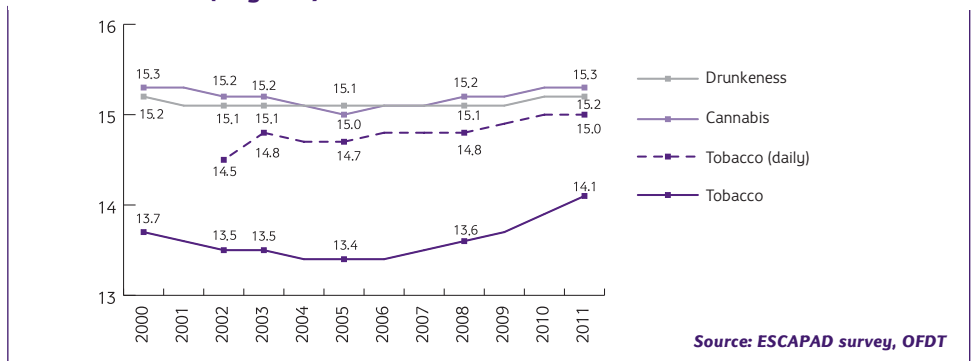


Figure 5 - Trends from 2000 to 2011 in use of main illegal drugs among 17-year-olds in metropolitan France (%)

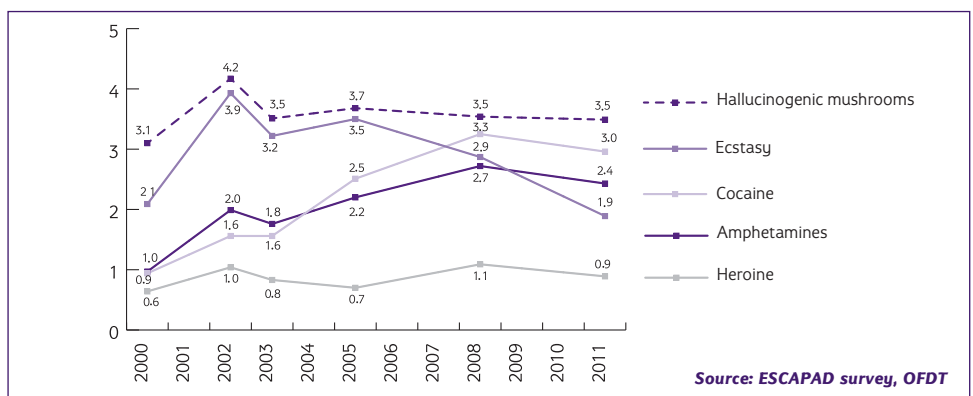


Table 1 - 2008-2011 Trends in the use of psychoactive substances by gender among 17-year-olds in metropolitan France (% in line)

		↘ → ↗		Sex ratio 2011	Together 2011	Together 2008
		Boys 2011	Girls 2011			
Tobacco	Lifetime use (↘)	66.9	69.9	0.96***	68.4***	70.7
	Within the month : <1 cig/day (occasional) (↘)	9.6	11.5	0.84***	10.5***	11.5
	Within the month (↔)	42.4	41.6	1.02	42.0***	40.5
	Daily (↔)	32.7	30.2	1.09***	31.5***	28.9
	Intensive (↔)	9.6	5.8	1.66***	7.7	7.7
Alcohol	Lifetime use (↘)	91.8	90.1	1.02***	91.0***	92.6
	Within the month : ≥1 use (↔)	79.7	74.2	1.07***	77.0	77.4
	Within the month : ≥10 uses (regular) (↔)	15.2	5.6	2.70***	10.5***	8.9
	Within the month : ≥30 or daily (↔)	1.6	0.3	6.04***	0.9*	0.8
Drunkenness	Lifetime use (↘)	63.5	53.3	1.19***	58.5***	59.8
	Within the year : ≥1 (↔)	56.4	44.1	1.28***	50.3	50.5
	Within the year : ≥3 (repeated) (↔)	34.0	21.3	1.60***	27.8***	25.6
	Within the year : ≥10 (regular) (↔)	15.0	5.7	2.62***	10.5***	8.6
5 drinks or more in one occasion	Within the month : ≥1 time (↔)	59.7	46.5	1.28***	53.2***	48.7
	Within the month : ≥3 times (↔)	29.0	15.9	1.82***	22.6***	19.7
	Within the month : ≥10 times (↔)	4.2	1.2	3.53***	2.7***	2.4
Cannabis	Lifetime use (↔)	44.0	38.9	1.13***	41.5	42.2
	Within the year : ≥1 use (↘)	37.8	31.2	1.21***	34.6***	35.9
	Within the month : ≥1 use (↘)	26.3	18.5	1.42***	22.4***	24.7
	Within the month : ≥10 uses (regular) (↘)	9.5	3.4	2.84***	6.5***	7.3
	Within the month : ≥30 or daily (↔)	4.5	1.4	3.26***	3.0	3.2
Poppers	Lifetime use (↘)	9.2	8.8	1.05	9.0***	13.7
Inhalants	Lifetime use (↔)	5.4	5.6	0.96	5.5	5.5
Hallucinogenic mushrooms	Lifetime use (↔)	4.8	2.1	2.29***	3.5	3.5
Cocaine	Lifetime use (↘)	3.3	2.7	1.22**	3.0*	3.3
Ecstasy	Lifetime use (↘)	2.2	1.6	1.39***	1.9***	2.9
Amphetamines	Lifetime use (↘)	2.9	2.0	1.45***	2.4*	2.7
LSD	Lifetime use (↔)	1.7	0.9	1.99***	1.3	1.2
Heroin	Lifetime use (↘)	1.0	0.8	1.18	0.9*	1.1
Crack	Lifetime use (↘)	0.9	0.7	1.35*	0.8*	1

*, **, ***: Chi-2 test significant respectively at the 0.05, 0.01 and 0.001 level for the gender comparisons
Significant decreases and increases at the 0.05 level (Chi-2 test) from 2008 to 2011 are in bold.

Source: ESCAPAD survey, OFDT

The differences in average age at first time use by gender did not vary between girls and boys, the latter of whom were still slightly more precocious in their use (by approximately two months) in 2011, regardless of the substance.

Other drugs

Of the other examined illegal substances (table 1), the highest lifetime use in 2011 were still with poppers and inhaled substances (9.0% and 5.5% respectively); next came hallucinogenic mushrooms and cocaine (3.5% and 3.0%), then amphetamines, ecstasy and crack (2.4%, 1.9% and 1.3%), and finally LSD and heroin, whose levels of lifetime use were less than 1.0%. Boys had higher levels of lifetime use than girls, except for poppers, inhaled substances and heroin, for which the gender difference was not significant. In the 2008-2011 period, most of these lifetime uses were down, especially for poppers and ecstasy, which recorded the most significant declines. Ecstasy, which is continuing a decline that began in 2005, reached its lowest level since 2000. Moreover, cocaine and amphetamine lifetime use demonstrated a slight drop for the first time since 2003 (figure 5).

Conclusion

The 2011 results of the ESCAPAD survey revealed a return to a more regular tobacco and alcohol consumption, yet also a decrease in the use of cannabis compared with 2008. These trends are similar to those observed in the young adult population (18-25) in the *Baromètre santé* 2010 health survey, whose key results were published in June 2011 [6].

However, interpreting the variations between two successive ESCAPAD surveys remains tricky: the observed trend reversals may only be temporary, and could be contradicted by future trends. Taking into consideration a longer time frame can therefore help put partial observation and occasional fluctuations into perspective. Thus, tobacco and alcohol use in the teenage population in the last de-

Psychotropic medicine

In 2008, the question on psychotropic medication use in the ESCAPAD questionnaire was significantly modified to distinguish between the different classes of medication used: tranquilisers, antidepressants, sleeping pills, neuroleptics, mood stabilisers, psycho stimulants, phytotherapy and homeopathy. The 2011 survey therefore enables these trends to be followed for the first time. Subsequently, today, 41.0% of 17-year-olds have taken at least one of these medicines in their lifetime, which represents a significant drop since 2008 (44.6%). However, recent use appears to have remained stable over the period (14.5% in 2011 versus 14.7% in 2008). Phytotherapeutic and homeopathic remedies remain the most frequently-tried medications by 17-year-olds (30.3%), followed by tranquilisers (15.0%), sleeping pills (10.7%) and antidepressants (5.6%), whose levels appear to have dropped from 2008 to 2011. The use of mood stabilisers (2.2%), neuroleptics (1.7%) and psycho stimulants (1.3%), however, seem to have gone up slightly. More girls than boys use this type of medication. Hence, 51.3% of girls stated having used such medication, versus 30.9% of boys. Only psycho stimulants, such as Ritalin® are shown to be used more often by boys (1.7% vs. 1.0%).

cade show robust trends that the most recently recorded observations are not in a position to call into question at this time. With the exception of a once-off increase in 2003, alcohol use has been relatively stable throughout the decade. The persistent and significant decline in tobacco use observed for more than a decade cannot be refuted yet, despite an increase in 2011.

In contrast, the change in alcohol use behaviours with an increase in drunken episodes or HED episodes is confirmed again and again every survey year. Cannabis use continues to fall and the widespread use observed in the late 90s now seems to have reversed itself. Finally, use of other illegal substances, which had also experienced an increase in lifetime use, seems to have stabilised at levels that, for now, remain limited.

It is indeed in this back and forth work between these two levels of occasional analysis and trend monitoring that ESCAPAD can now make a meaningful contribution to a better understanding of psychoactive substance use in the teenage population.

Bibliography

1. BECK F., GUIGNARD R., RICHARD J.B., TOVAR M.L. and SPILKA S., "Levels of drug use in France in 2010. An analysis of the Baromètre santé 2010 data on psychoactive substances use among the adult population", *Tendances*, no. 76, 2011, 6 p.
2. BECK F., LEGLEYE S. and PERETTI-WATEL P., "The use of psychoactive substances among adolescents in their late teens – Setting up an annual survey", *Tendances*, no. 10, 2000, 4 p.
3. BECK F., LEGLEYE S. and SPILKA S., "Cannabis, alcohol, tobacco, and other drugs in late teens: level of use and latest evolutions", 2003 ESCAPAD survey, *Tendances*, no. 39, 2004, 4 p.
4. BECK F., LEGLEYE S. and SPILKA S., "Drugs at age 17 - Trends, use context and risk-ranking", *Tendances*, no. 49, 2006, 4 p.
5. GODEAU E., ARNAUD C. and NAVARRO F., *La santé des collégiens en France / 2010. Données françaises de l'enquête internationale Health Behaviour in School-Aged Children*, Saint-Denis, INPES, 2012, 250 p.
6. LEGLEYE S., SPILKA S., LE NEZET O. and LAFITEAU C., "Drug use among 17-year-olds. Results of the 2008 ESCAPAD survey", *Tendances*, no. 66, 2009, 6 p.

Credits

Special thanks to Colonel Pasquiet and Captain Fouteau-David of the *Mission liaison partenariat-communication* of the National service directorate. Thanks also to the civil and military personnel of the National service directorate, who presented the survey to the potential recruits and helped ensure logistics.

Tendances

Chief Editor
Maud Pousset

Editorial Committee
Catherine Berthier, Sylvain Dally,
Alain Epelboin, Serge Karsenty, Maria Melchior

Editorial Secretary
Julie-Émilie Adès

Graphic Designer
Frédérique Million

Printing
Imprimerie Masson / 69, rue de Chabrol
75010 Paris

ISSN 1295-6910 / Legal publication registration

French Monitoring Centre for Drugs
and Drug Addiction

3, avenue du Stade-de-France
93218 Saint-Denis-La-Plaine cedex
Tél. : + 33(1) 41 62 77 16
Fax : + 33 (1) 41 62 77 00
e-mail : ofdt@ofdt.fr

The seventh French ESCAPAD 2011 national survey took place from 14 to 22 March 2011 in cooperation with the *Direction du service national* (DSN, or National service directorate, which recruits volunteers for France's armed forces) during France's *Journée défense et citoyenneté* (JDC, formerly the JAPD, National defence and preparation day) in all metropolitan centres as well as centres in French Guyana, Martinique, Guadeloupe and Reunion. All those called up who were present were surveyed, without exception. In total, 200 centres active during the period were involved (185 of these were in metropolitan France) and 32,249 French teenagers answered an anonymous, self-administered questionnaire about their health and their use of a dozen psychoactive substances. The participation rate (number of filled questionnaires/number of teenagers present) was 99.3%. The final analysed sample here included 27,402 17-year-olds from metropolitan France; the sample was weighted to give administrative departments their true demographic weight while respecting the departmental gender ratio. The ESCAPAD survey was approved by the French National Council for Statistical Information (CNIS) and was deemed of general public statistical interest by the Approval committee. It also received the approval of the French Data Protection Agency (CNIL).

In this issue, we kept the same use indicators employed in previous analyses. Lifetime use: use at least once in a person's life / Use in the last year (or current use): use at least once in the 12 months preceding the survey / Use in the last month (or recent use): use at least once in the 30 days preceding the survey / Regular use: use at least 10 times in the 30 days preceding the survey / Daily use: use at least once a day in the 30 days preceding the survey / Repeated drunken episodes: at least three drunken episodes in the last year / Regular drunkenness: at least 10 drunken episodes in the last year.